1048-17-199 **Dijana Jakelić*** (jakelicd@uncw.edu), Department of Mathematics and Statistics, University of North Carolina, Wilmington, 601 S. College, Wilmington, NC 28401-5970, and **Adriano Moura**.
Representations of hyper loop algebras.

Hyper loop algebras are certain Hopf algebras associated to affine Kac-Moody algebras. We will focus on finite-dimensional representations of hyper loop algebras over arbitrary fields. The main results concern the classification of the irreducible representations, their tensor products, the construction of the Weyl modules, and base change. Several of the results are related to the study of irreducible representations of polynomial algebras and Galois theory. Time permitting, we may also address multiplicity problems for the underlying tensor category. (Received February 08, 2009)